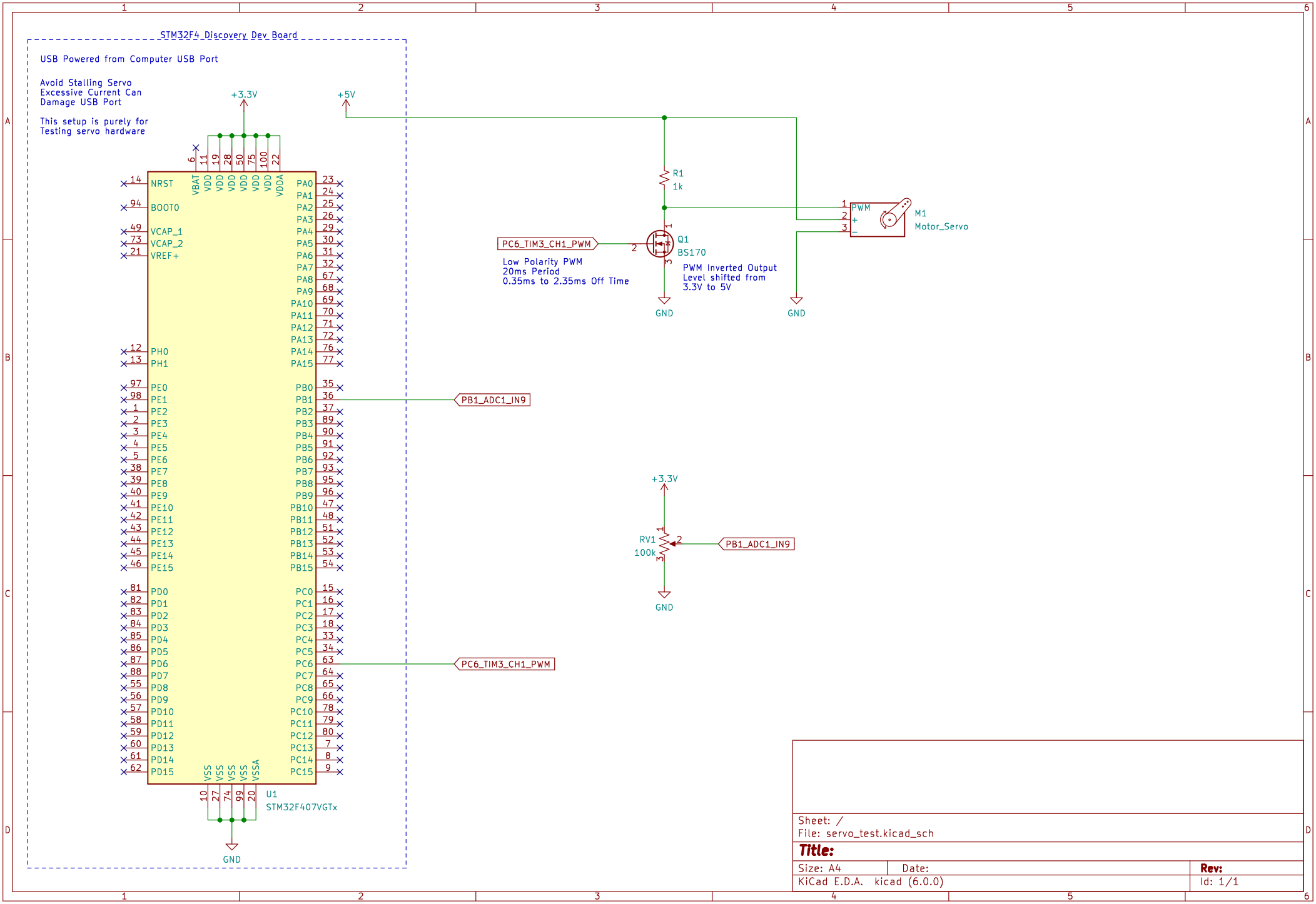
STM32F4 Discovery Dev Board
USB Powered from Computer USB Port
Avoid Stalling Servo
Excessive Current Can
Damage USB Port
This setup is purely for
Testing servo hardware
+3.3V
+5V
VBAT
VDD
VDDA
NRST
BOOT0
VCAP_1
VCAP_2
VREF+
PH0
PH1
PE0
PE1
PE2
PE3
PE4
PE5
PE6
PE7
PE8
PE9
PE10
PE11
PE12
PE13
PE14
PE15
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PD8
PD9
PD10
PD11
PD12
PD13
PD14
PD15
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
PC8
PC9
PC10
PC11
PC12
PC13
PC14
PC15
VSS
VSSA
U1
STM32F407VGTx
GND
PB1_ADC1_IN9
PC6_TIM3_CH1_PWM
R1
1k
Q1
BS170
Low Polarity PWM
20ms Period
0.35ms to 2.35ms Off Time
PWM Inverted Output
Level shifted from
3.3V to 5V
PWM
M1
Motor_Servo
RV1
100k
Sheet: /
File: servo_test.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (6.0.0)
Id: 1/1